

Package ‘ROpenCVLite’

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Type Package

Title Install 'OpenCV'

Version 4.30.2

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Description Installs 'OpenCV' for use by other packages. 'OpenCV' <<https://opencv.org/>> is library of programming functions mainly aimed at real-time computer vision. This 'Lite' version contains the stable base version of 'OpenCV' and does not contain any of its externally contributed modules.

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LazyData TRUE

Imports utils, pkgbuild, parallel

SystemRequirements cmake, C++11

RoxygenNote 7.1.0

Biarch true

Encoding UTF-8

Suggests knitr, rmarkdown

VignetteBuilder knitr

URL <https://swarm-lab.github.io/ROpenCVLite/>,
<https://github.com/swarm-lab/ROpenCVLite>

BugReports <https://github.com/swarm-lab/ROpenCVLite/issues>

NeedsCompilation no

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ROpenCVLite-package	<i>ROpenCVLite: A package to install OpenCV within R</i>
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Description

This is a utility package that installs OpenCV within R for use by other packages. This Lite version does not contain any of the contributed modules of OpenCV.

Author(s)

Simon Garnier, <garnier@njit.edu>

See Also

Useful links:

- <https://swarm-lab.github.io/ROpenCVLite/>
- <https://github.com/swarm-lab/ROpenCVLite>
- Report bugs at <https://github.com/swarm-lab/ROpenCVLite/issues>

installOpenCV	<i>Install OpenCV</i>
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Description

This function will attempt to download, compile and install OpenCV on the system. This process will take several minutes.

Usage

```
installOpenCV(batch = FALSE)
```

Arguments

batch	A boolean indicating whether to skip (TRUE) or not (FALSE, the default) the interactive installation dialog. This is useful when OpenCV needs to be installed in a non-interactive environment (e.g., during a batch installation on a server).
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Value

A boolean indicating whether OpenCV was or not installed on the system.

Author(s)

Simon Garnier, <garnier@njit.edu>

Examples

```
## Not run:  
installOpenCV()  
  
## End(Not run)
```

<i>isCmakeInstalled</i>	<i>Check Cmake Installation</i>
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Description

This functions checks that Cmake is installed on the system.

Usage

```
isCmakeInstalled()
```

Value

A boolean indicating whether Cmake was or not installed on the system.

Author(s)

Simon Garnier, <garnier@njit.edu>

Examples

```
isCmakeInstalled()
```

isOpenCVInstalled	<i>Check OpenCV Installation</i>
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Description

This functions checks that OpenCV is installed within the R library.

Usage

```
isOpenCVInstalled()
```

Value

A boolean indicating whether OpenCV was or not installed on the system.

Author(s)

Simon Garnier, <garnier@njit.edu>

Examples

```
isOpenCVInstalled()
```

opencvConfig	<i>C/C++ configuration options</i>
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Description

Determines the configuration options for compiling C/C++-based packages against OpenCV installed by [ROpenCVLite](#).

Usage

```
opencvConfig(output = "libs", arch = NULL)
```

Arguments

output	Either 'libs' for library configuration options or 'cflags' for C/C++ configuration flags.
arch	architecture relevant for Windows. If NULL, then R.version\$arch will be used.

Value

A concatenated character string (with [cat](#)) of the configuration options.

Author(s)

Simon Garnier, <garnier@njit.edu>

Examples

```
if (isOpenCVInstalled()) {  
  opencvConfig()  
  opencvConfig(output = "cflags")  
  opencvConfig(arch = R.version$arch)  
}
```

opencvVersion

OpenCV version

Description

Determines the version of OpenCV installed within R.

Usage

```
opencvVersion()
```

Value

A character string with the version of OpenCV installed by [ROpenCVLite](#).

Author(s)

Simon Garnier, <garnier@njit.edu>

Examples

```
if (isOpenCVInstalled()) {  
  opencvVersion()  
}
```

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